REPORT ON EXPLANATIONS ON THE USE OF RESOURCES

Project Number	653477
Acronym	ASTERICS
Period Number	3rd
Period covered	From 1/May/2018 to 30/Apr/2019

Beneficiary Number	1
Beneficiary Short Name	ASTRON (Adj. RP 2)

1. Direct personnel costs declared as actual costs

Person months	Associated WP
0.0	1
0.0	3

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	1
Beneficiary Short Name	ASTRON

1. Direct personnel costs declared as actual costs

Person months	Associated WP
28.3	1
0.2	2
50.9	3
29.2	4
57.2	5

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

Description	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
Subcontracting of Modular data reduction pipelines for astronomy data to two companies: Phytonic.nl and VIDE NVO Avilys.	YES		57 415.92 €
TOTAL			57 415.92 €

Direct costs of providing financial support to third parties

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	1
Beneficiary Short Name	ASTRON – (UTRO) ASTRON (Adj. RP 2)

1. Direct personnel costs declared as actual costs

Person months	Associated WP	
0.0	1	

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Short description	Category	Associated WP	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
Correction in a travel declaration form: the project resource claimed tip-money that unfortunately was	Travel	1	YES		-2.00 €

Short description	Category	Associated WP	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
not detected with reporting. The auditor noticed it.					
TOTAL	-	·			-2.00€

No use of resources was specified for major cost items

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	1
Beneficiary Short Name	ASTRON – (UTRO) ASTRON (Adj. RP 1)

1. Direct personnel costs declared as actual costs

No use of resources was specified for this category

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Short description	Category	Associated WP	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
Correction in a travel declaration form: the project resource described the costs of snack/ drink on board of an airplane where he should	Travel	2	YES		-5.00€

Short description	Category	Associated WP	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
have received a					
receipt by e-mail					
but didn't. He did					
however claim the					
costs, which were					
approved by the					
managing director					
of the institute.					
On advice of the					
auditor, we do					
remove these costs					
from the reported.					
TOTAL		1	1	1	-5.00 €

No use of resources was specified for major cost items

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	2
Beneficiary Short Name	CNRS (Adj. RP 2)

1. Direct personnel costs declared as actual costs

Person months	Associated WP
16.31	4
2.5	4

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	2
Beneficiary Short Name	CNRS (Adj. RP 1)

1. Direct personnel costs declared as actual costs

Person months	Associated WP
0.01	4

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	2
Beneficiary Short Name	CNRS

1. Direct personnel costs declared as actual costs

Person months	Associated WP
90.51	3
60.44	4
0.11	5

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

Description	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
Subcontracting with OROBIX SRL (Orobix is an Italian engineering company focused on building artificial intelligence- powered systems in multiple domains, including life-science and manufacturing) Work as provisions of services "GammaLearn : from simulation to event characterization from LACT data though deep learning".	YES		25 840.00€
Subcontracting with TRUST- IT (Trust-IT is a nimble and dynamic SME specialised in research & communication in the field of Information and	YES		112 500.00€

Description	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
Communication Technologies and in developing innovative web & mobile applications across Europe and globally) Work as provisions of services for the following purpose "Waveflier : A prototype for a real time Gravitational Wve transient signal classifier. (Testing different architechtural solution and release a visualizer for result)"			
Subcontracting with TriOpSys (TriOpSys is a specialised in designing, building and managing mission critical IT systems) Work as provisions of services for the following purpose "Towards the ASTRON Data Portal : a functional prototype based on the APERTIF Long Term Archive"	YES		60 000.00 €
TOTAL			198 340.00 €

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Short description	Category	Associated WP	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
Accomodation, subsistence and transportation costs in the frame of the second ASTERICS- OBELICS International School (4-8 June 2018 in Annecy, France) - 61 attendees	Other goods and services	4	YES		30 558.36 €
Accomodation, subsistence and transportation costs in the frame of the second	Other goods and services	4	YES		29 414.72 €

Short description	Category	Associated WP	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
ASTERICS- OBELICS International School (7-13 Avril 2019 in Annecy, France) - 59 attendees					
Travel costs for LAPP Laboratory	Travel	4	YES		36 537.41 €
Travel costs on WP4 for Luth laboratory (12 travels - IVOA meeting 2018, Provenance week 2018, 4th ASTERICS school, Forum and training event 2018, ADASS & IVOA 2018, Workshop SUSS 2018, ASTERICS Dadi Technology forum 5, Symposium ASTERICS "The New Era of Multi-Messenger Astrophysics")	Travel	4	YES		11 827.20 €
TOTAL					108 337.69 €

No use of resources was specified for major cost items

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	2
Beneficiary Short Name	CNRS – (TP) OBSPARIS

1. Direct personnel costs declared as actual costs

Person months	Associated WP	
3.93	4	

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	2
Beneficiary Short Name	CNRS – (TP) UNISTRA (Adj. RP 2)

1. Direct personnel costs declared as actual costs

Person months	Associated WP	
8.04	4	

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	2
Beneficiary Short Name	CNRS – (TP) UNISTRA (Adj. RP 1)

1. Direct personnel costs declared as actual costs

Person months	Associated WP	
0.69	4	

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	2
Beneficiary Short Name	CNRS – (TP) UNISTRA

1. Direct personnel costs declared as actual costs

Person months	Associated WP	
5.6	4	

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	3
Beneficiary Short Name	INAF

1. Direct personnel costs declared as actual costs

Person months	Associated WP
0.09	1
1.77	2
43.04	3
22.64	5

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

Third Party name	Туре	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
Agenzia Spaziale Italiana (ASI), Italian Space Agency. At its premises (HQ buildings in Rome), the ASI Astronomical Data Center (ADSC) is hosted, which is operated with the support of INAF permanent and temporary staff. For the last two decades, ASI and INAF, in the framework of a MoU, have been collaborating in the fields of astrophysics and planetology for what concerns space missions and their data.	Free of charge	NO	Within the agreements foreseen in WP3 Obelics, two fixed-term (Tempo Determinato-TD from now on) researchers were hired by INAF-OAR (Astronomical Observatory of Rome) during reporting period n. 1: in September and October 2016, respectively. Thanks to a long-standing framework agreement between INAF and ASI according to which, absolutely free of charge, INAF personnel can occupy office spaces at ASI buildings and viceversa, it was agreed that the two researchers would perform their research activity at ASI-ASDC facilities in Rome, which would allow the researchers to benefit from the science data center located at ASI by interacting with the scientists hosted there to gather requirements and feedback. Such arrangement was not known when the GA was signed however, as no charge was claimed from ASI, no receipts were foreseen for INAF, and, above all, the essence of the project would not change, INAF opted for not requesting an Amendment to the GA to add ASI as its third party, but, rather, for claiming the total costs of the two TDs as costs for resources not used on its premises. In order to deduct the indirect costs automatically generated by the two TDs' personnel costs from the	141 319.07 €

Third Party name	Туре	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
			"requested contribution" line, these costs have added in the "additional information on indirect costs – use of in-kind contributions not used in the premises" section. Further details have been provided in the Periodic Technical Report.	
TOTAL				141 319.07 €

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Short description	Category	Associated WP	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
A set of education, public outreach and citizen science events were organized by INAF-OATs where the public had the opportunity of navigating and interacting with a Virtual Reality environment with a virtual sky provided by data available in the Virtual Observatory (in	Other goods and services	2	NO	In the framework of the ASTERICS WP2 (DECS) INAF asked for permission to organize the described events to present and divulgate the results of the project. The possibility of navigating and interacting with a virtual sky provided by data available in the Virtual Observatory permitted the public to appreciate some of the project activities and their results. Besides, the events were held as part of proESOF2020, an initiative preparing the EuroScience Open Forum which will be held in Trieste in summer 2020. Both the project coordinator and the PO	19 642.00 €

Short description	Category	Associated WP	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
connection with the DADI WP4), and discover modern optical and radio telescopes. The events were attended by over 350 people. One of these events was "From an exagon to virtual exploration": a presentation to the public of the results of the Asterics project through Virtual Reality, an innovative technique allowing a virtual navigation in photorealistic environments in real time, as well as the interaction with objects and locations there presented. The costs for the realisation of the multimedia and VO contents, together wih the costs for the rent of the VR devices used for the event have been claimed. "Virtours" the virtual platform employed for the events, was filed by Ikon s.r.l. in the Italian Patent Office under n. 102016000101039 on 25/3/19. This accounts for the reason why INAF turned to Ikon s.r.l. for the realisation of the described events.				authorized the event, though not originally foreseen as an ASTERICS deliverable.	
Marco Molinaro's travel to Victoria, Canada from 25	Travel	4	YES		3 028.14 €

Short description	Category	Associated WP	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
May to 3 June 2018, IVOA spring meeting + TCG face to face meeting					
Certificate of Financial Statements	Other goods and services	1	YES		9 895.24 €
Fabio Pasian's travel to Victoria, Canada, from 26 May to 2 June 2018, IVOA spring meeting	Travel	4	YES		4 027.78 €
Cumulative costs for the travels of Dr. Forchi, Dr. Micol, Dr. Mayor and Dr. Dowler, international experts who were invited to the DADI/OBELICS face-to-face meeting held in Trieste from 29 to 30 January 2019	Travel	4	NO	Within the Asterics activity aimed at interfacing WP3 (OBELICS) and WP4 (DADI) which is INAF-based, INAF planned to organise a three- days noon-to-noon working meeting in Trieste, which was not foreseen as an Asterics deliverable. The aim of the meeting was to discuss the Authorization&Authentication (A&A) and Workflow developments implemented by Task 3.4.2 in relation to the development/upgrade of IVOA standards coverd in Task 4.3, and particularly the Single-Sign- On (SSO) and standardization of Group Authorization. The meeting was held at the end of January and relieved the burden of lenghty discussions on the A&A topic at the DADI Tech Forum, limiting it to a report or alert. Experts IVOA guests from outside Europe were invited, whose costs have been claimed here. Other costs bore by INAF for the organization of the event, such as the catering service and a working dinner held on 29/1/19 have also been claimed. Both the project coordinator and the PO approved the initiative.	3 831.68 €
TOTAL			1		40 424.84 €

No use of resources was specified for major cost items

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	3
Beneficiary Short Name	INAF (Adj. RP 2)

1. Direct personnel costs declared as actual costs

Person months	Associated WP	
0.69	4	

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	3
Beneficiary Short Name	INAF (Adj. RP 1)

1. Direct personnel costs declared as actual costs

No use of resources was specified for this category

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	4
Beneficiary Short Name	UCAM (Adj. RP 2)

1. Direct personnel costs declared as actual costs

No use of resources was specified for this category

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Short description	Category	Associated WP	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
V Stolyarov on 28/05/18 - 01/06/18 to Spain for URSI at RASC Conference	Travel	3	YES		849.46€
HAGUE PETER on 15-17/4/18 to	Travel	3	YES		57.10€

Short description	Category	Associated WP	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
EDINBURGH to attend to a seminar to present results of work					
TOTAL					906.56€

No use of resources was specified for major cost items

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	4
Beneficiary Short Name	UCAM

1. Direct personnel costs declared as actual costs

Person months	Associated WP	
62.6	3	

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Short description	Associated WP	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
costs incurred to provide storage space associated with the data analysis of task 1 undertaken on the University of Cambridge PETA2/CSD3 high performance commuting system.	3	NO	The costs were not foreseen in Annex 1, but are justified as they provide the most cost effective and best technical solution to the cutting-edge data reduction undertaken within the task - the PETA4/CSD3 system was not in existence at the time of applying for the ASTERICS grant.	1 491.13 €
TOTAL				1 491.13 €

No use of resources was specified for major cost items

Beneficiary Number	5
Beneficiary Short Name	JIVE

1. Direct personnel costs declared as actual costs

Person months	Associated WP
4.97	3
16.55	5

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Short description	Category	Associated WP	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
travel for WP5 Cleopatra	Travel	5	YES		5 677.14€

Short description	Category	Associated WP	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
travel for WP3 Obelics	Travel	3	YES		473.60€
audit cost	Other goods and services	1	YES		5 250.00 €
equipment for WP5 Cleopatra	Equipment	5	YES		1 137.01 €
TOTAL					12 537.75 €

No use of resources was specified for major cost items

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	5
Beneficiary Short Name	JIVE (Adj. RP 2)

1. Direct personnel costs declared as actual costs

Person months	Associated WP
-0.65	3
-1.77	5

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	5
Beneficiary Short Name	JIVE (Adj. RP 1)

1. Direct personnel costs declared as actual costs

Person months	Associated WP
0.51	3

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	6
Beneficiary Short Name	INTA (Adj. RP 1)

1. Direct personnel costs declared as actual costs

Person months	Associated WP
1.29	4

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Short description	Category	Associated WP	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
Adjustment for lower cost of two trips by Jose Manuel Alacid	Travel	2	YES		20.00€
TOTAL		1	1	,	20.00€

No use of resources was specified for major cost items

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	6
Beneficiary Short Name	INTA

1. Direct personnel costs declared as actual costs

Person months	Associated WP
30.09	4

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

Short description	Category	Associated WP	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
Access Costs from external people.	Other goods and services	4	YES		12 759.42 €
TOTAL					12 759.42 €

Other direct costs reported as use of in kind contribution from third party

No use of resources was specified for major cost items

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	7
Beneficiary Short Name	UEDIN

1. Direct personnel costs declared as actual costs

Person months	Associated WP
23.96	4

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

Short description	Category	Associated WP	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
Audit Report	Other goods and services	4	YES		3 132.06 €
Lawrence, Morris, Voutsinas, IVOA Meeting, Victoria,	Travel	4	YES		9 645.43 €

Short description	Category	Associated WP	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
Canada, 26 May - 02 June 18					
TOTAL			12 777.49 €		

Other direct costs reported as use of in kind contribution from third party

No use of resources was specified for major cost items

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	7
Beneficiary Short Name	UEDIN (Adj. RP 2)

1. Direct personnel costs declared as actual costs

No use of resources was specified for this category

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

Short description	Category	Associated WP	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
ASTERICS DADI Technology Forum 4, catering and room hire, Edinburgh, 16 Apr 18 - 17 Apr 18	Other goods and services	4	YES		3 841.89€
TOTAL			3 841.89 €		

Other direct costs reported as use of in kind contribution from third party

No use of resources was specified for major cost items

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	8
Beneficiary Short Name	UHEI

1. Direct personnel costs declared as actual costs

Person months	Associated WP
12.0	4
6.0	4
12.0	4

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

Short description	Category	Associated WP	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
renting fee glasses for the meeting 2018	Other goods and services	4	YES		30.00€
conference room rental fee for Heidelberg meeting 2018	Other goods and services	4	YES		1 045.00 €
Cost for the internet connection used for IVOA-Standes during IAU- Generalmeeting	Other goods and services	4	YES		478.74 €
TOTAL					1 553.74 €

Other direct costs reported as use of in kind contribution from third party

No use of resources was specified for major cost items

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	9
Beneficiary Short Name	OU (Adj. RP 2)

1. Direct personnel costs declared as actual costs

Person months	Associated WP
0.66	2

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	9
Beneficiary Short Name	OU

1. Direct personnel costs declared as actual costs

Person months	Associated WP
7.86	2

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

Short description	Category	Associated WP	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
Promotional videos of Citizen Science Experiments: Filming By Magic Beans Ltd and LTI Open University	Other goods and services	2	YES		16 616.10 €

Short description	Category	Associated WP	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
(producer, Production Management, Shooting, Editing and post production scripts.					
Travel and Subsistence for Dr J Jarvis to attend the ASTERICS Citizen Science Workshop in Trieste, Italy 20-29/1/2018	Travel	2	YES		1 205.47 €
Travel and subsistence for Professor Stephen Serjeant and Dr Jo Jarvis to attend the ASTERICS conference 24-26/03/2019 - The New Era of Multi-Messenger Astrophysics Conference in Groningen, Netherlands. (Registration fee not claimed)	Travel	2	YES		2 218.35 €
Promotional items for ASTERICS - Stickers and bags	Other goods and services	2	YES		1 414.87 €
Laptop, bag and accessories to replace damaged laptop for Citizen science exhibitions and promotion	Other goods and services	2	YES		3 056.07 €
Beanwave invoice for folders for Young Stargazers (printing and design), to give entry- level accessible introductions to the ASTERICS citizen science experiments and address the younger age	Other goods and services	2	YES		3 840.17 €

Short description	Category	Associated WP	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
demographic previously not explicitly addressed).					
Travel and Subsistence for Prof S Serjeant to attend the ASTERICS general assembly representing WP2 and the Open University, Amsterdam, The Netherlands 25th-26th November 2018	Travel	2	YES		559.66€
TOTAL					28 910.69 €

Other direct costs reported as use of in kind contribution from third party

No use of resources was specified for major cost items

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	10
Beneficiary Short Name	FAU

1. Direct personnel costs declared as actual costs

Person months	Associated WP
17.51	3

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	11
Beneficiary Short Name	VU/VUmc

1. Direct personnel costs declared as actual costs

No use of resources was specified for this category

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	12
Beneficiary Short Name	CEA

1. Direct personnel costs declared as actual costs

Person months	Associated WP
12.0	3

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	13
Beneficiary Short Name	UVA (Adj. RP 1)

1. Direct personnel costs declared as actual costs

No use of resources was specified for this category

2. Direct personnel costs declared as unit costs

Person months	Associated WP
0.29	5

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	13
Beneficiary Short Name	UVA

1. Direct personnel costs declared as actual costs

No use of resources was specified for this category

2. Direct personnel costs declared as unit costs

Person months	Associated WP
5.59	5

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

Short description	Category	Associated WP	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
Visit DESY & TeVPA Berlin Zeuthen and Berlin 26-8-2018 to 31-8-2018	Travel	5	YES		1 464.52 €

Short description	Category	Associated WP	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
TOTAL					1 464.52 €

Other direct costs reported as use of in kind contribution from third party

No use of resources was specified for major cost items

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	14
Beneficiary Short Name	UGR (Adj. RP 1)

1. Direct personnel costs declared as actual costs

Person months	Associated WP
-1.77	5

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	14
Beneficiary Short Name	UGR

1. Direct personnel costs declared as actual costs

Person months	Associated WP
10.15	5

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	16
Beneficiary Short Name	IEEC (Adj. RP 2)

1. Direct personnel costs declared as actual costs

No use of resources was specified for this category

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	16
Beneficiary Short Name	IEEC

1. Direct personnel costs declared as actual costs

Person months	Associated WP
15.0	5

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	17
Beneficiary Short Name	IFAE

1. Direct personnel costs declared as actual costs

Person months	Associated WP
12.0	3

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	18
Beneficiary Short Name	UCM

1. Direct personnel costs declared as actual costs

Person months	Associated WP
5.7	3

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

Description	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
SOFTWARE DEVELOPMENT	YES		40 000.00 €
TOTAL			40 000.00 €

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	19
Beneficiary Short Name	INFN

1. Direct personnel costs declared as actual costs

Person months	Associated WP
4.2	3

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

Short description	Category	Associated WP	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
New paths in data analysis and open data provision in Astronomy and Astroparticle Physics, 23-26	Travel	3	YES		159.62€

Short description	Category	Associated WP	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
October 2018, flight costs of project resource 4					
New paths in data analysis and open data provision in Astronomy and Astroparticle Physics, 23-26 October 2018, hotel costs of project resource 4	Travel	3	YES		431.00€
New paths in data analysis and open data provision in Astronomy and Astroparticle Physics, 23-26 October 2018, flight costs of project resource 2	Travel	3	YES		271.00€
The New Era of Multi-Messenger Astrophysics Conference, 25-29 March 2019, hotel costs of project resource 2	Travel	3	YES		583.00€
The New Era of Multi-Messenger Astrophysics Conference, 25-29 March 2019, flight costs of project resource 2	Travel	3	YES		338.00€
New paths in data analysis and open data provision in Astronomy and Astroparticle Physics, 23-26 October 2018, hotel costs of project resource 2	Travel	3	YES		323.00€
The New Era of Multi-Messenger Astrophysics Conference, 25-29 March 2019, hotel costs of project resource 1	Travel	3	YES		683.00€

Short description	Category	Associated WP	Foreseen in Annex 1	Explanations (if not foreseen in Annex 1)	Costs
The New Era of Multi-Messenger Astrophysics Conference, 25-29 March 2019, flight costs of project resource 3	Travel	3	YES		275.00€
The New Era of Multi-Messenger Astrophysics Conference, 25-29 March 2019, hotel costs of project resource 3	Travel	3	YES		163.00€
The New Era of Multi-Messenger Astrophysics Conference, 25-29 March 2019, flight costs of project resource 1	Travel	3	YES		483.00€
The New Era of Multi-Messenger Astrophysics Conference, 25-29 March 2019, flight costs of project resource 2	Travel	3	YES		298.00€
TOTAL	<u> </u>	1	1	1	4 007.62 €

Other direct costs reported as use of in kind contribution from third party

No use of resources was specified for major cost items

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	20
Beneficiary Short Name	STFC

1. Direct personnel costs declared as actual costs

Person months	Associated WP
5.42	5

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	21
Beneficiary Short Name	DESY

1. Direct personnel costs declared as actual costs

Person months	Associated WP
3.6	5

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	22
Beneficiary Short Name	SURFnet

1. Direct personnel costs declared as actual costs

Person months	Associated WP
1.2	5

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	23
Beneficiary Short Name	GTD

1. Direct personnel costs declared as actual costs

Person months	Associated WP
9.93	5

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	24
Beneficiary Short Name	OPNT

1. Direct personnel costs declared as actual costs

Person months	Associated WP
19.01	5

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	24
Beneficiary Short Name	OPNT (Adj. RP 2)

1. Direct personnel costs declared as actual costs

No use of resources was specified for this category

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	25
Beneficiary Short Name	KIS

1. Direct personnel costs declared as actual costs

Person months	Associated WP
13.3	3
11.9	4

2. Direct personnel costs declared as unit costs

No use of resources was specified for this category

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services

Beneficiary Number	26
Beneficiary Short Name	S[&]T

1. Direct personnel costs declared as actual costs

No use of resources was specified for this category

2. Direct personnel costs declared as unit costs

Person months	Associated WP
1.6	3
3.6	3

3. Use of in kind contribution from third party

No use of in kind contribution was specified for Direct Costs

PCP or PPI subcontracting costs

No use of resources was specified for this category

Direct costs of subcontracting

No use of resources was specified for this category

Direct costs of providing financial support to third parties

No use of resources was specified for this category

Other direct costs: explanation of major cost items if the amount exceeds 15% of personnel costs

No use of resources was specified for this category

Other direct costs - unit costs for internally invoiced goods and services